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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,318	12/26/2001	Michael Volovets	FS10077/US	8905
33072	7590	10/21/2003	EXAMINER	
KAGAN BINDER, PLLC SUITE 200, MAPLE ISLAND BUILDING 221 MAIN STREET NORTH STILLWATER, MN 55082			FOX, JOHN C	
			ART UNIT	PAPER NUMBER
			3753	

DATE MAILED: 10/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/034318

Applicant(s)

Examiner

FX

Group Art Unit

3753

---The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address---

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on 8/18/03
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-5, 7, 9-16 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-3, 5, 11-16 is/are rejected.
- ☒ Claim(s) 4, 7, 9-10 is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
  - ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_
  - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

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This action is responsive to the communication filed August 18, 2003.

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1-3, 5, 11, 13 and 15-16 are rejected under 35 U.S.C. § 103 as being unpatentable over Pechoux et al in view of Wessman, of record. Pechoux et al shows a metering valve having a bellows stem seal 19 and which includes a closed position. Portion 8b of valve member 8 includes two triangular metering slots to provide a linear change in flow rate versus position. Wessman teaches another metering valve and includes two

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secondary slots 3, which are shown as triangular but which may also have a curved bottom, see column 3, lines 1-6. The secondary slots end short of the seat to provide an exponential flow rate versus position. The ~~primary slots and secondary slots are arranged symmetrically and have~~ different shapes. It would have been obvious for one of ordinary skill in the art to have used such a regulating cone as Wessman teach in place of the portion 8b of Pechoux et al to similarly provide an exponential flow rate.

Claim 12 is rejected under 35 U.S.C. § 103 as being unpatentable over Pechoux et al in view of Wessman as applied above and further in view of Ronchi . Ronchi shows a reciprocating valve which uses a diaphragm stem seal. It would have been obvious for one of ordinary skill in the art to have used such a diaphragm in place of the bellows of Pechoux et al in view of the readily apparent equivalence.

Claim 14 is rejected under 35 U.S.C. § 103 as being unpatentable over Pechoux et al in view of Wessman as applied above and further in view of Kingsford et al (US '416). Pechoux et al, as modified, show the

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claimed valve except for being a fluoropolymer. Kingsford et al teach that valves of fluoropolymer are known where a corrosive fluid is valved or high purity of the fluid must be maintained, see column 1, lines 18-31. It would have been obvious for one of ordinary skill in the art to have make the Pechoux et al valve, as modified, of a fluoropolymer to provide for using the valve thereof with corrosive or high purity fluids.

Claims 4, 7 and 9-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL

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ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry concerning this communication should be directed to Examiner Fox at (703) 308-2595 or John.Fox@uspto.gov. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0861. The fax number for TC 3700 is 703-872-9302. For responses after final the fax number is 703-872-9303. The Supervisory Primary Examiner for Art Unit 3753 is John Rivell who can be reached at (703) 308-2599 or at John.Rivell@uspto.gov.



JOHN FOX  
PRIMARY EXAMINER  
ART UNIT 3753

jcf  
October 18, 2003